

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/915,554
Attorney Docket No. Q63310

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A wireless communication apparatus for performing a wireless communication, comprising:

a transceiving unit for receiving and transmitting data externally, the transceiving unit maintaining a link to at least one slave device and receiving a requested priority from the at least one slave device, when the wireless communication apparatus is operated as a master; [[and]]

a controller for determining a priority of the at least one slave device considering the requested priority, determining a frequency of communication according to the priority of the at least one slave device and controlling the communication with the at least one slave device; and

a memory for storing the frequency of communication of the at least one slave device.

2. (currently amended): The wireless communication apparatus of claim 1, wherein the [[the]] frequency of communication increases as the priority increases.

3. (original): The wireless communication apparatus of claim 1, wherein the controller assigns a priority lower than the requested priority when the requested priority is not allowable to the at least one slave device.

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4. (original): The wireless communication apparatus of claim 1, wherein the controller communicates with the at least one slave device in accordance with the frequency of communication.

5. (original): The wireless communication apparatus of claim 4, wherein the controller subtracts one time from the frequency of communication after each communication between the controller and the at least one slave device.

6. (canceled).

7. (currently amended): The wireless communication apparatus of claim [[6]] 1, wherein the controller updates the frequency of communication stored in the memory after communicating with the at least one slave device.

8. (currently amended): A wireless communication system having at least one slave device and a master device linked with the at least one slave device, the at least one slave device transmitting a requested priority to the master device, and the master device receiving the requested priority from the at least one slave device, and determining and assigning the at least one slave device with a priority considering the requested priority, wherein the at least one slave

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device transmits the requested priority according to the amount of data to be transmitted to the master device.

9. (original): The wireless communication system of claim 8, wherein the at least one slave device transmits the requested priority to the master device upon being linked with the master device.

10. (canceled).

11. (original): The wireless communication system of claim 8, wherein the priority assigned by the master device is lower than the requested priority if the requested priority is not allowable to the at least one slave device.

12. (original): The wireless communication system of claim 8, wherein the master device communicates with the at least one slave device in accordance with a frequency of communication which is determined according to the priority.

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13. (original): The wireless communication system of claim 12, wherein the master device subtracts one time from the frequency of communication after each communication between the master device and the at least one slave device.

14. (original): The wireless communication system of claim 12, wherein the frequency of communication increases as the priority increases.

15. (currently amended): A communication method in a wireless communication system having at least one slave device and a master device linked with the at least one slave device, comprising the steps of:

(a) receiving a requested priority from the at least one slave device; [[and]]

(b) determining and assigning the at least one slave device with a priority considering the requested priority; and

(c) communicating with the at least one slave device according to the priority,

wherein the step (c) subtracts one time from the frequency of communication after each communication with the at least one slave device.

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16. (original): The communication method of claim 15, wherein, in the step (b), the priority assigned to the at least one slave device is lower than the requested priority, if the requested priority is not allowable to the at least one slave device.

17. (canceled).

18. (canceled).

19. (new): The wireless communication apparatus of claim 1, wherein levels of the priority include high, medium, and low levels.

20. (new): The wireless communication apparatus of claim 1, wherein the memory stores a high priority maximum number which is a maximum number of slave devices of a high priority, and a medium priority maximum number which is a maximum number of slave devices of a medium priority.

21. (new): The wireless communication apparatus of claim 1, wherein the memory stores priorities of the slave devices that are currently linked.

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22. (new): The wireless communication apparatus of claim 1, wherein levels of the priority include high, medium, and low levels.

23. (new): The wireless communication apparatus of claim 1, wherein the memory stores the a total number of slave devices that are currently linked.

24. (new): The wireless communication apparatus of claim 23, wherein the memory stores a polling frequency of each slave device that is currently linked.

25. (new): The wireless communication apparatus of claim 24, wherein slave devices that have a polling frequency greater than zero are sequentially polled according to their priorities.

26. (new): The wireless communication apparatus of claim 25, wherein one time is subtracted from the polling frequencies of each slave after the respective slave has been polled.

27. (new): The wireless communication apparatus of claim 26, wherein any slave device having a non-zero polling frequency is repeatedly polled.

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28. (new): The wireless communication apparatus of claim 27, wherein one is subtracted from the total number of slave devices stored in the memory when a slave device has a zero polling frequency.

29. (new): The wireless communication apparatus of claim 28, wherein the memory is updated to have an initial value of both the total number of slave devices and the polling frequency of each slave device when the total number of slave devices becomes zero.

30. (new): The wireless communication apparatus of claim 7, wherein the controller updates a total number of slave devices stored in the memory whenever a slave device becomes linked or unlinked.